DOCUMENT RESUME

ED 051 104 SP 004 970

TITLE	Preparing Researchers in Urban Pre-Secondary Education.
INSTITUTION	University of South Florida, Tampa. Coll. of Education.
PUB DATE	70
NOTE	17p.; 1971 AACTE Distinguished Achievement Award entry
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	*Doctoral Programs, *Educational Development, *Educational Researchers, Elementary Education, Research Needs, *Research Skills, Research Utilization, *Urban Schools

ABSTRACT

In planning the first doctoral program in education at the new University of South Florida, the guiding purpose was to create a significant innovation recognizing among other things that 1) urban schools are society's most difficult education problem, for which effective research offers hope for solutions, 2) the college is involved in urban schooling, 3) its newness and growth permit flexibility, 4) the college has great faculty strength for the pre-secondary age group, 5) an initial research emphasis should strengthen subsequent doctoral programs, and 6) a different program for preparing researchers is imperative. The goal of the program is to produce research "statesmen" able to ask significant questions and obtain information leading to better learning experiences. In addition to extensive statistics, research design, measurement, evaluation, computer language, psychological and societal foundations, there are inter-disciplinary programs in urbanology; demographic analysis; social science methodologies; systems approaches in education; management principles; and a cross section of elementary education including reading, early childhood, child guidance, exceptional children, etc. A guided internship of one year is in the urban school systems or other agencies such as Model Cities. The present continuing evaluation will be supplemented by an extensive follow-up in subsequent years. (Author/MBM)

ED051104

PREPARING RESEARCHERS

IN

URBAN PRE-SECONDARY EDUCATION

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Submitted for consideration

by

The AACTE

for

The Distinguished Achievement Award for

Excellence in Teacher Education

College of Education

University of South Florida

Tampa, Florida 33620

November, 1970

SP004970

ABSTRACT

PREPARING RESEARCHERS IN URBAN PRE-SECONDARY EDUCATION

Note. The assumption is made that "Teacher Education" is interpreted broadly by the AACTE to include the preparation of varied personnel who assist in improving teaching.

RATIONALE

In planning the first doctoral program in Education at the new University of South Florida, the guiding purpose was to create a significant innovation, recognizing that:

1. Urban schools from society's most difficult educational problem.
2. Effective research offers hope for solutions.
3. We are the only urban state university in Florida.
4. From the start, our college has involved itself in urban schooling.
5. Our newness and growth permits flexibility (opened 1960, now over 17,000 students, nearly 200 Education faculty).
6. The pre-secondary is the age most easily affected and in it we have great faculty strength.
7. An initial research emphasis should strengthen subsequent doctoral programs.
8. A "different" program for preparing researchers is imperative.

Typical doctoral training is in the controlled experimentation seldom possible to urban school systems where the socio-political realities preclude control and manipulation of variables, random assignment, etc. Researchers may be unable to meet legitimate requests by teachers or administrators; communication falters.

Many systems attempt a solution by training their own researchers - - inadequately. The new program must be rooted in the needs of existing school systems.

OBJECTIVE

Research "statesmen" able to ask significant questions and obtain information leading to better learning experiences. By systematic educational inquiry, they may upgrade the quality of information upon which decisions are based.

PROGRAM DESCRIPTION

In addition to such customary competencies as extensive statistics, research design, measurement, evaluation, computer language, psychological and societal foundations, there are inter-disciplinary programs in urbanology, demographic analysis, varied social science methodologies, systems approaches in education, management principles and a cross section of such elementary education as reading, early childhood, child guidance, culturally deprived, exceptional children, and theoretical issues in curriculum and instruction. Running through one academic year is a guided internship within urban school systems or other agencies such as Model Cities, working on their current problems.

EVALUATION

The present continuing evaluation will be supplemented by an extensive follow up of graduates in subsequent years.

PREPARING RESEARCHERS

IN

URBAN PRE-SECONDARY EDUCATION

Note. The assumption is made that "Teacher Education" is interpreted broadly by the AACTE to include the preparation of varied personnel who assist in improving teaching.

RATIONALE

In January, 1970, a group of students became partners with faculty members in creating the first doctoral program in Education at the University of South Florida: "a Ph.D. in research in urban pre-secondary education."

Why this choice?

1. Urban schools form the area of our society's greatest need for new answers to be reached through research.

2. Effective researchers and evaluators are in desperate demand both to facilitate innovation and to meet the requirements of ESEA and other contracts for urban centers.

3. Ours is the only member of the Florida university system located in an urban setting and thus best able to attack these problems. The Tampa Bay region forms an adequate and rapidly growing laboratory destined soon to become a megalopolis. Perhaps our program can anticipate and help to prevent some problems.

4. From the start, the U.S.F. College of Education has concerned itself with urban problems and has continually interacted with the schools.

5. Ours is a new university (growing in enrollment from zero to over 17,000 in one decade; nearly 200 faculty in Education alone) and possesses inter-departmental flexibility with an acceptance of innovation. The rapid expansion has also meant an opportunity to fill any faculty gaps necessary to the program.

6. This program might least duplicate doctoral programs elsewhere, creating a significant role for our new institution in State and nation.

7. The research emphasis in this first program could be expected to strengthen subsequent doctoral programs.

8. Pre-secondary levels hold a far higher hope for making a difference in the lives of individuals and groups than at older levels.

9. Our existing faculty was unusually strong in elementary and early childhood education.

10. There was need for a new type of preparation of educational researchers. This point is elaborated more fully:

Limitations in existing training of researchers

Typically, the training of educational researchers has emphasized the kind of controlled experimentation seldom possible to urban school systems. Often, researchers employed by school systems are not able to respond to legitimate requests from their employers. The way in which a research question is asked and the conditions under which the process must be conducted do not meet the basic requirements for scientific inquiry through experimental design. Control and manipulation of independent variables, random assignment of individuals to treatment, and desired sampling procedures are frequently impossible within the socio-political environment in which school systems must function. The consequences of this inability to bridge the gap between research training and job requirements has been a reduced confidence between users and producers of educational research. School operations cannot wait for all conditions of rigorous experimentation to be satisfied; decisions must be made. Superintendents thus may find it impossible to use educational research as a vital element of school operation.

A consequence of the inability of researchers with traditional training to function effectively has led many school systems to identify and develop personnel

from within to serve as educational researchers. The level of sophistication has often been inadequate and biased. Partially trained researchers have been unable to respond to research problems with more than partial skills.

The effects of all this upon educational planning and development are becoming increasingly a matter of national concern. The situation has been brought into sharp focus by the requirements for evaluation of special projects under various titles of the Elementary and Secondary Education Act of 1965 and in other federal and state programs designed to improve public schools. Recent emphasis upon accountability has brought additional visibility to the inadequacies of public schools in conducting research-based inquiry and providing research-based information regarding the outputs of special and regular programs.

From these considerations it was apparent that the theoretical preparation and the experiences provided within the new program must be strongly rooted in a knowledge of the practical needs of city schools:

1. The responsibilities of urban researchers.
2. The types of research problems to which public school researchers must respond.
3. The procedures to be employed by educational researchers in generating information for decision making.

OBJECTIVE OF THE PROGRAM

The goal of this new program is to produce research "statesmen" able to ask the questions most significant to urban schools and to obtain the information that will meet needs and lead to better learning by children.

The first post-Master's degree candidates started in January, 1970, and should complete their four-quarter per year program, including internship, by June, 1972.

Periodic follow up after graduation will permit continuing evaluation and modification of the program.

Steps in implementing the objective

1. January,1970. Staff on hand. First candidates enrolled.
2. September, 1970. Staff enlarged. New cadre of candidates enrolled.
3. January, 1971. Systematic procedures will be established for selection and admission of a cadre of new candidates for each year.
4. Course content and sequence will be continuously developed as evidenced by their installation.
5. June, 1971. Future internship pattern will be developed and integrated into the program.
6. As each group completes the program, members will be helped to obtain appropriate employment.
7. A follow up of each participant will be made one year and three years after graduation questioning both graduate and employer. There will be other informal contacts.
8. Results of the above will lead to any appropriate modifications of the program.

DESCRIPTION OF THE PROGRAM

The program varies in accord with the background of preparatory competencies possessed by entering candidates. The total range from 90 to 136 quarter hours beyond the Master's degree and includes the following.

Specialization:

Statistics - inferential and variance
Statistics - regression and correlation
Statistics - non-parametric, Bayesian
*Survey of research methods in the social sciences (inter-disciplinary)
Research design (experimental)
Research design (non-experimental)
Advanced measurement (cognative)
Computer language and applications in education
*Systematic planning of evaluation and development in education
*Systems approaches in education
Current issues in tests and measurement

Foundations:

*Urban sociology
*Complex organizations - community analysis
*Demographic analysis
*Management principles and practices (Business Administration)
Advanced principles of learning
Social psychology

*Elementary Education

Trends in reading
Early childhood education
Education of culturally deprived
Exceptional children
Theoretical issues in curriculum and instruction
Guidance in elementary schools

*Internship (described below)

Electives

Dissertation

* Starred items are unusual and some may be unique in the preparation of educational researchers. Some of these elements are described below.

NEW DIRECTIONS IN PREPARING EDUCATIONAL RESEARCHERS

Observations of the operations of public school research divisions reveals that the requests for research services require broader skills and understandings than typical research training programs provide. Many requests for research inquiry cannot be met by application of experimental designs and other classical research models. Educational researchers in operational settings require preservice experiences that enable them to select and apply a wide variety of research principles and practices to satisfy needs for various levels of information required by operational demands of public school systems.

In addition to a solid core of studies in measurement design and analysis, a sequence of new studies in research has been developed for this urban educational researcher training program.

1. Demographic analysis, a basis for educational planning and development.

Increasingly public school researchers find it necessary to gain skill related to descriptions of the incidence, distribution and interactions of selected characteristics of populations. Analysis of census tract data opinion polling and studies of population changes and movements form a significant proportion of requests for research information. All participants in the urban educational research program engage in a study of demography to strengthen capabilities to apply appropriate skills and understandings to the collection and processing of information.

2. Inter-disciplinary survey of research methods in social sciences.

This cause provides participants with an introduction to the one or two most important research approaches in various branches of the social studies. An interdisciplinary seminar draws upon staff members in sociology, economics, public health, anthropology, and history. Staff members from each of the respective fields create learning experiences designed to assist participants to become familiar with

strengths, weaknesses and issues involved in applying research methods that are used in the social sciences. The purpose of the inter-disciplinary survey of research methods is to develop new perspectives and ways of looking at research problems. It should broaden participants' capability to ask research questions that are not typically asked by educators. For example, economists sensitize participants to the input and output factors related to the cost of alternative courses of action. Research procedures in history are expected to sensitize educational researchers to issues related to validity and reliability of data, particularly in the absence of empirical evidence.

3. Systematic planning of evaluation and development in education.

The impact of federal legislation such as the Elementary and Secondary Education Act (1965) and the Education Professions Development Act (1968) has created a need for public schools and other agencies concerned with education to organize means by which fundable programs can be planned, evaluated and developed systematically. Educational researchers in urban school systems throughout the country have had to meet the challenge created by federal legislation. Skills and knowledge have been developed on the run because training patterns have not prepared researchers for these newly developing dimension of an educational researcher's responsibilities.

Coupled with the impact of federal legislation is the influence of systems approaches in education. The combined effect adds new importance to the need to develop capabilities in educational researchers that include a majority of the following skills.

(a) Writing performance objectives
(b) Designing evaluative studies
(c) Comprehending feedback, recycling and program development procedures
(d) Conducting evaluative studies
(e) Reporting evaluative studies
(f) Writing and using proposals as a planning and development vehicle

This course is designed to enable educational researchers to give leadership and support to systematic approaches to educational planning and development.

4. Systems approaches to educational planning and development.

This course teaches the theory and applications of PERT (Program Evaluation and Review Techniques) PPBS (Program Planning Budgeting Systems) and MIS (Management Information Systems). Both an understanding of underlying principles and a reasonable capability to apply them to practice is growing in importance as a training need of educational researchers, because an increasing amount of research and evaluation requires their use. The unique quality of this course is that it places research activities within an operational content so that the educational researcher can see the relationship and contributions of his efforts to the actions, decisions, or processes of the total effort to improve learning.

5. Management principles and practices.

Educational research within operational settings such as a school system is usually initiated and used by management. Unless the questions of management are clearly understood, the research effort may be misdirected. And unless the results of research are presented in such a manner that management can comprehend them the research efforts may not be profitably employed. Both management and research functions are closely related in an operational setting. Management must be able to ask researchable questions. In turn, researchers must be sensitive to management needs, problems, and perogatives in order to design and report findings. To the extent that each operational level of a school system is knowledgeable about the limitations and requirements of the other, mutually facilitating services will increase benefits to the children of that school system. In light of the preceding rationale educational researchers need exposure to training in the area of management. Consequently arrangements have been made with the College of Business Administration to develop a special course in management in which participants in the urban educational research program will study topics such as control theory, information theory, personnel development, and decision theory.

6. Elementary education.

The preceding item stressed the importance of being able to communicate clearly with management. Of at least equal importance is the ability to communicate with classroom teachers, where rests the actual pay-off for the total school and research structure. The researcher must have sufficient knowledge of classroom and child problems to understand what teachers are asking. It is his role to translate their needs into researchable questions and to offer help in obtaining answers. Here is where his statesmanship is most needed in formulating research that can make actual differences in children's learning. The courses are designed to sample a cross-section of teaching problems.

7. Internship in educational research.

In an attempt to facilitate integration of theoretical studies, participants will spend portions of three quarters working in school systems and other agencies concerned with education. Directors of Research in school systems near the University of South Florida are supervising participants in working on typical research problems. At the present for example, one participant is studying population sizes and characteristics in a Florida urban county which anticipates the opening of kindergartens on a county-wide basis. Another participant is involved in evaluating several Elementary and Secondary Education Act projects. In each instance additional supportive training is provided in a seminar designed to assist participants with issues and problems related to their internships. In addition to bringing theory and practicum serves to strengthen the relationship between the applied arm of education as represented by school systems and the theoretical arm represented by the university. Closer working relations create opportunities for interaction which yields benefits to the field of education.

8. In-service team support.

After graduates of this program are placed in job responsibilities, a supportive team of staff members and fellow students will be available to serve as a

resource whenever problems of a significant nature arise. The availability of this team places at the call of the employing school system a comprehensive array of expertise to engage in the solution of research problems arising from the operations of public schools. The services of this team and involvement in its efforts should provide a built-in self renewal mechanism for the educational researcher and make available to school systems an efficient, low-cost means for upgrading the quality of information on which their decisions are based.

PERSONNEL INVOLVED IN PROGRAM DEVELOPMENT

The urban educational research program is located in the Measurement-Research Division of the College of Education. It is directed by an individual who brings an unusual blend of educational and experiential background to the program. In addition to holding a doctorate in educational psychology, measurement and public school administration, his experiences include fifteen years as director of research and development in a major urban school system and three years as a plans and development officer in the U.S. Army. The preceding combination coupled with broad consultation experience in school systems, federal agencies and private organizations provide unusual insight and leadership to the direction and development of the program.

An advisory committee assists in guiding program development. This committee is composed of area coordinators within the College of Education. As programatic objectives and operations are developed they are presented to the committee so that communication among departmental areas can be facilitated.

Personnel in colleges other than the College of Education are involved in order to obtain the most knowledgeable staff members as teachers of specific courses. As a case in point, the College of Business Administration has developed a special course in management which will emphasize problems and issues that are typically related to management of research projects. The College of Basic Studies is cooperating in creating a course in Inter-disciplinary survey of research methods in the various social sciences. Staff members in psychology, sociology, geography, and computer services are cooperating in achieving the objectives of the program.

Public school researchers and research personnel from agencies such as the Tampa Model Cities Program and federal offices meet periodically to review directions of the program. Insights and developments in the field are thus constantly being incorporated into the program.

EVALUATIVE PROCEDURES AND DATA

During the period 1969 - 1972 the program is in a developmental phase. The specific items stated in the section on "Steps in implementing the objective" will serve as milestones to guide program development. The progress of the program will be revealed by the existence of planned courses, procedures, and personnel. The advisory committee serves as an internal control vehicle in that various steps of program development are evaluated by the committee to insure consistency and coordination with allied areas.

The ultimate evaluation will come some time in the period 1972 - 1975. Follow-up studies will determine the success with which participants respond to educational research problems. Evidence of leadership in the field of educational research will be determined by quality of publications produced by participants and contributions to operational effectiveness in urban school systems as judged by responsible authorities.

CONTRIBUTION TO EDUCATION

The quality of education in any school system is the product of decisions made by its varied personnel. The quality of these decisions depends primarily upon the adequacy of undergirding information. The quality and dependability of such information may typically be upgraded by systematic inquiry through research. It is the function of research to generate a quality of information that permits wiser decisions within each segment of a school system. Valid research potentially provides the best protection from whim, bias, political pressure, tradition, or the personal limitations of decision makers.

Thus, the preparation of researchers able to function effectively within school systems holds vast potential for their improvement. The contribution to education may be very great, indeed.

BUDGET

	Salary	Contract	Other	Total
Development costs 1/2 time of staff member	12,000			12,000
Program Director 1/3 time	7,000			7,000
Secretarial Assistance Part time 1/10 salary	500			500
Fringe Benefits	1,232			1,232
Printing and Duplication of Materials			200	200
Consultants Program Development		1,000		1,000
Travel			1,800	1,800
Stipends for Participants 3,600 x 8 = 28,800	28,800			28,800
Total				52,532